

Equipment/kits in lab and it's capabilities follow:

6-16-15

Made all of my antibiotics for the semester. Namely, chloramphenicol, Ampicillin, Kanamycin, Streptomycin, tetracycline. All were stored in -20 in either water or ethanol(200 proof or 170 proof).

Gel isolated Blue Chromoprotein cDNA (Unknown part number) in a psb1c3 vector system along with Enhanced Yellow fluorescent protein cDNA. They were cut at the XBA1 and PST1 sites in the prefix and suffix, respectively. Only the insert for these cut out. This procedure was done entirely under the supervision and assistance of Dr. Brewer. The band weight seems to be slightly smeared in shape but approximately where it was expected to be. The Backbone included a regulatory/promoter region and was just at the SPE1 and PST1 site in the suffix. This was to affix the insert behind the promoter region. The XBA1 and SPE1 sites have complementary overhangs once they are cut with their respective Restriction endonuclease. The gel isolations were carried out using the thermoscientific dna gel isolation and clean up kit. The manufactures recommendations were used verbatim. No concentration for the purified samples were detected using the imgin nanophotometer. The DNA for EYFP and BCP were both provided by Br.Brewer to cut and ligate. The source for the Part J23119 was unknown or undocumented in my journal.

6-17-15

Ligations for J23119 and EYFP and BCP were carried out at room temperature which at the time was 24-25 Celcius. The T4 Ligase from fermentas was heat inactivated at 70 celsius for 10 minutes on an isotemp heat block. Two microliters of this ligation dna and 40 microliters of luicigin 10g electrocompetent cells were used. Twenty microliters of cells were used for the eYFP transformation and forty for the bcp. The Promoter/plasmid source was gel purified by peter. His purification had a concentration of 35ng/ul. The eYFP cell suspension had an ARC and was repulsed as recommended by the micropulser's manufacture, biorad. SOC media was immediately added to the solution and the cells were incubated at 39 celsius at 250 RPM. This SOC was made either by Dr. Brewer or the 2014 GSU iGEM team. The source is still not entirely known. After incubation the cells were plated on 34ug/ml chloramphenicol plates.

6-19-15

All of the three plates for BCP had greater than 100 colonies, whereas the eYFP only had a few. 18 colonies were screened using the qiagen PCR mastermix using the VF2 and VR primers.

Liquid cultures for XL1 Blue cells were made so they could be streaked to isolate and eventually made competent. This was done on 30ug/ul tetracycline. The recommended concentration by stratagene.

6-20-15

The XL1 Blue cells were plated on tetracycline plates after 13.8 hours of incubation in the shaker. A gel for the PCR of BCP/j23119 was performed.

